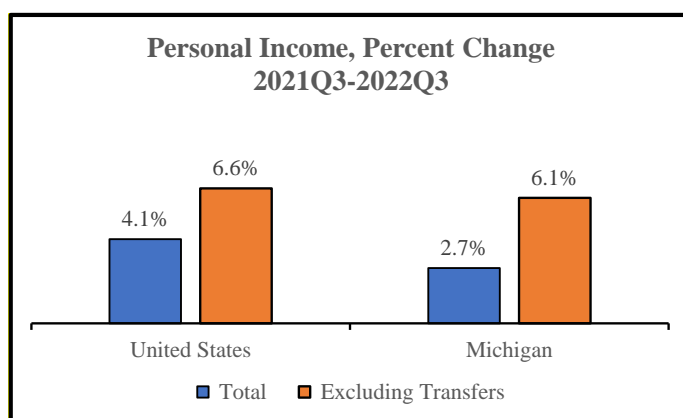




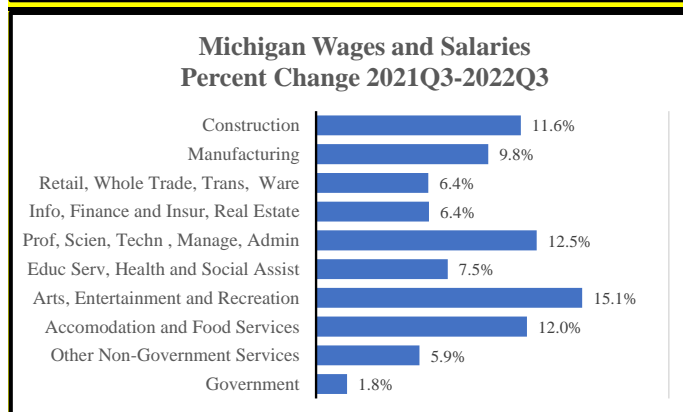
## State Personal Income Data Release

On December 23, 2022, the Bureau of Economic Analysis released 2022Q3 state personal income data and revised earlier 2022 quarterly state income data. Below are some highlights of that release <sup>(c)</sup>:



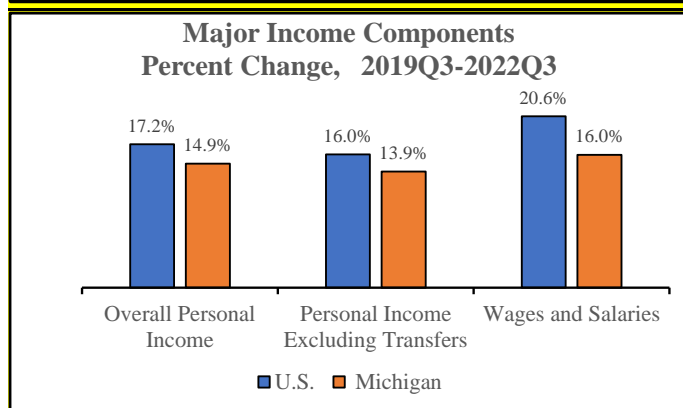
### Total Personal Income

- Between 2021Q3 and 2022Q3, the massive COVID economic stimulus packages were winding down.
- As a result, while overall Michigan personal income, increased 2.7 percent from a year ago, Michigan personal income excluding transfers rose 6.1 percent. Nationally, overall personal income grew 4.1 percent while personal income excluding transfers rose 6.6 percent.



### Total Wage and Salary Payments

- Compared to a year ago, total Michigan wage and salary payments were up overall and across sectors. Overall, total Michigan wages and salary payments were up 8.1 percent – slightly faster than 7.9 percent growth nationally.
- Four broad industries saw double-digit wage increases over the past year: Arts, Entertainment and Recreation; Professional, Scientific, Technology and Management; Accommodations and Food Services; and Construction.



### Pre-Pandemic Comparisons

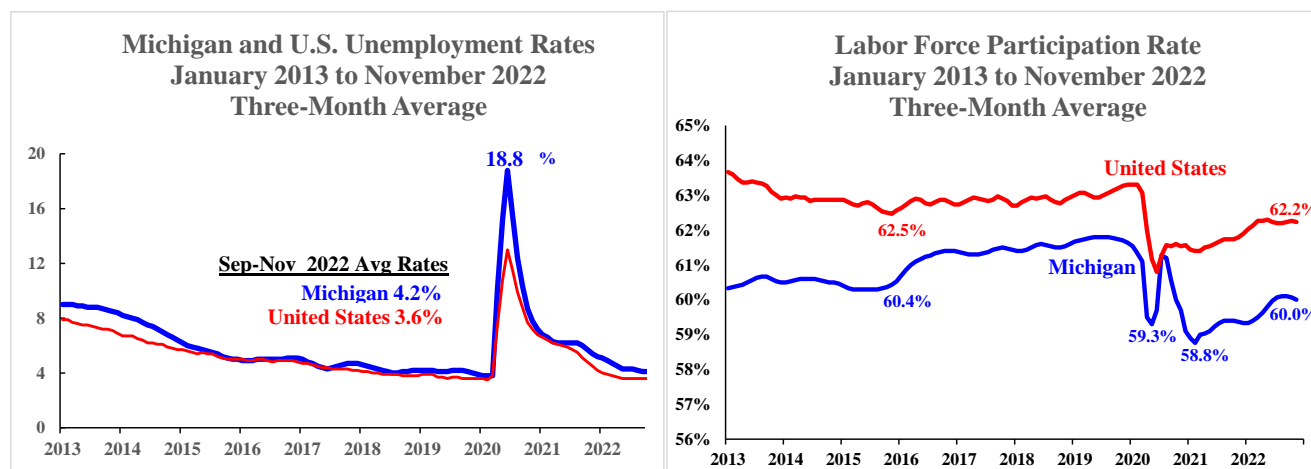
- Between 2019Q3 and 2022Q3, overall Michigan personal income was up 14.9 percent while Michigan personal income excluding transfers rose 13.9 percent. Nationally, overall personal income was up 17.2 percent and personal income excluding transfers rose 16.0 percent.
- Total Michigan wage and salary payments were up 16.0 percent between 2019Q3 and 2021Q3 compared with 20.6 percent nationally.

# November 2022 Summary

## Unemployment Rate Estimates

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- The monthly Michigan unemployment rate estimate rose slightly to 4.3 percent in November. The three-month average of the Michigan unemployment rate is 4.2 percent for November. Compared to last November, the three-month average is down 1.2 percentage points. Compared to the pre-pandemic February 2020 rate, the current average is up 0.4 of a percentage point.
- The average number of people employed in Michigan between September 2022-November 2022 was 87,300 lower than the number employed in February 2020. Compared to the three-month average of people employed between September 2021-November 2021, the current three-month average is up 119,000 people. The September 2022-November 2022 average of people unemployed is 17,100 people higher than the number of unemployed in February 2020.
- The U.S. unemployment rate fell to 3.6 percent in November. November's national jobless rate is 0.6 of a percentage point lower than the November 2021 rate (4.2 percent), and 0.1 of a percentage point higher than the February 2020 rate (3.5 percent).
- Both the Michigan and U.S. labor force participation rates remain significantly lower than their pre-pandemic participation rates.



### Employment by Place of Residence (in Thousands)<sup>(a)</sup>

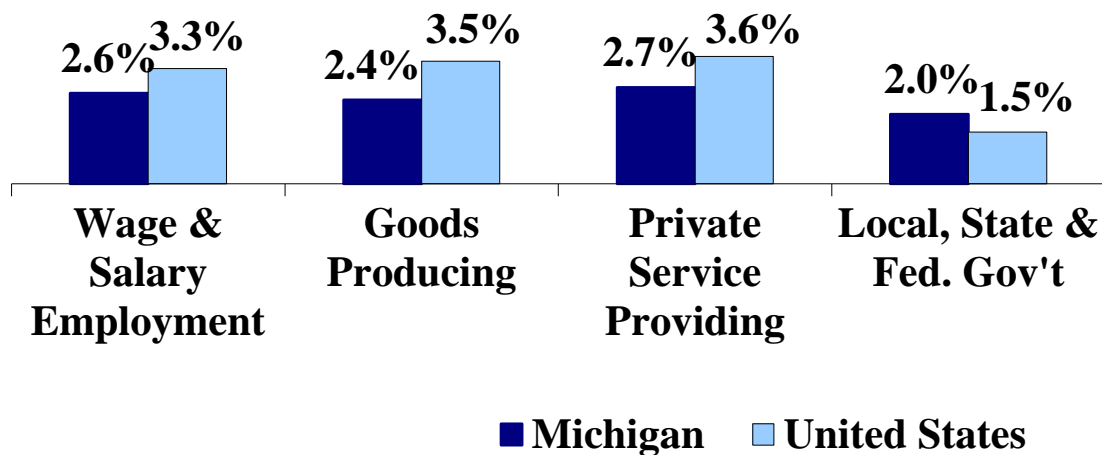
	Annual 2021	Sep 2022	Oct 2022	Nov 2022	Chg Fr Mo Ago Level	Chg Fr Mo Ago %	Chg Fr Yr Ago Level	Chg Fr Yr Ago %	Three Month Average
<b>Michigan</b>									
Labor Force	4,776	4,861	4,855	4,853	-2	0.0%	64	1.3%	4,856
Employed	4,496	4,660	4,650	4,645	-5	-0.1%	104	2.3%	4,652
Unemployed	280	201	205	208	3	1.5%	-40	-16.1%	205
Unemployment Rate	5.9%	4.1%	4.2%	4.3%	n.a.	0.1% pts	n.a.	-0.9% pts	4.2%
<b>United States</b>									
Labor Force	161,204	164,619	164,646	164,527	-119	-0.1%	2,212	1.4%	164,597
Employed	152,581	158,850	158,593	158,527	-66	0.0%	2,992	1.9%	158,657
Unemployed	8,623	5,770	6,053	6,000	-53	-0.9%	-780	-11.5%	5,941
Unemployment Rate	5.3%	3.5%	3.7%	3.6%	n.a.	-0.1% pts	n.a.	-0.6% pts	3.6%

## Employment by Place of Work (Payroll)

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- Compared to November 2021, Michigan payroll employment was up by 109,800 jobs (2.6 percent). State payroll employment rose by 13,800 jobs in November 2022 from October 2022. Nationally, November 2022 payroll employment was up by 4.9 million jobs (3.3 percent) from a year ago. National employment rose 256,000 jobs in November.

## Payroll Employment Growth



- In the goods-producing sector, Michigan payroll employment increased 2.4 percent in November from a year ago; employment in the private service-providing sector rose 2.7 percent. From a year ago, November national payroll employment rose 3.5 percent in the goods-producing sector and increased 3.6 percent in the private service-providing sector.
- At 41.8 hours, manufacturing weekly hours in Michigan were up 0.3 of an hour from last year.

### Wage and Salary (Payroll) Employment (in thousands)<sup>(b)</sup>

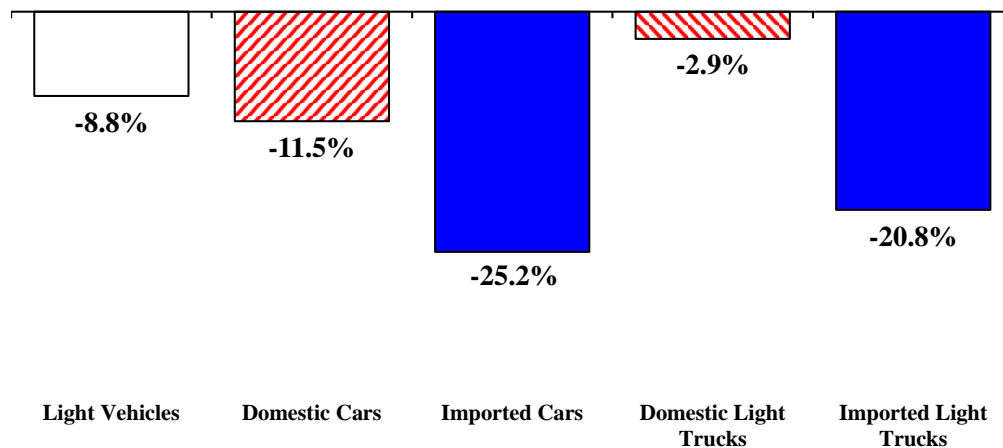
	2021 <u>Annual</u>	MI Nov <u>2021</u>	MI Nov <u>2022</u>	Percent <u>Change</u>	2021 <u>Annual</u>	US Nov <u>2021</u>	US Nov <u>2022</u>	Percent <u>Change</u>
Wage & Salary Employment	4,193.5	4,274.3	4,384.1	2.6%	141,308	148,005	153,264	3.6%
Goods Producing	766.8	782.2	800.8	2.4%	19,397	20,499	21,288	3.8%
Manufacturing	583.7	595.7	611.0	2.6%	12,294	12,466	12,918	3.6%
Private Service Providing	2,853.2	2,913.4	2,993.2	2.7%	99,604	105,412	109,592	4.0%
Trade, Trans. & Utilities	777.3	784.3	801.7	2.2%	27,319	28,013	28,760	2.7%
Services	1,791.6	1,842.9	1,896.3	2.9%	61,491	65,696	68,807	4.7%
Local, State & Fed. Gov't	573.5	578.7	590.1	2.0%	22,307	22,094	22,384	1.3%
Manufacturing Weekly Hours	40.8	41.5	41.8	0.3 hrs	42.7	41.3	41.0	-0.3 hrs

## Motor Vehicle Sales Down From Last Year

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- The U.S. light vehicle sales rate, constrained by supply chain shortages, fell to 14.2 million units in November. Compared to last November, sales were up 8.5 percent.
- U.S. sales of domestic light vehicles rose 7.9 percent from last October while foreign sales increased 10.9 percent. In November 2022, at 20.1 percent, the foreign share of U.S. light vehicle sales was up 0.4 of a percentage point from a year earlier.
- Auto sales increased 13.5 percent compared to last November, while light truck sales increased 7.1 percent from November 2021. Year-over-year (y-o-y), heavy truck sales were up 16.2 percent from last November.
- In October 2022 (the most recent month for which inventory data are available), retail vehicle inventories were up 32.8 percent from last October –the seventh straight percentage year-over-year increase following 24 months of year-over-year declines.

### Year-to-Date 2022 Vehicle Sales Down From Year Ago



### Motor Vehicle Sales Statistics

(Millions, Seasonally Adjusted Rates, unless otherwise specified)

	2021 <u>Total</u>	Sep 2022	Oct 2022	Nov 2022	3 Month Average	Nov Chg fr Yr Ago Level	Nov Chg fr Yr Ago %
Autos	3.4	2.9	3.2	3.2	3.1	0.4	13.5%
Domestics	2.4	2.2	2.5	2.4	2.3	0.3	13.0%
Imports	1.0	0.8	0.7	0.8	0.8	0.1	15.1%
Import Share	29.1%	25.9%	22.9%	24.3%	24.3%	0.3% pts	
Light Trucks	11.6	10.7	12.0	11.1	11.3	0.7	7.1%
Domestics	9.0	8.7	9.7	9.0	9.1	0.6	6.6%
Imports	2.6	2.0	2.3	2.1	2.1	0.2	9.4%
Import Share	22.3%	19.1%	19.1%	18.8%	19.0%	0.4% pts	
Total Light Vehicles	14.9	13.6	15.2	14.2	14.4	1.1	8.5%
Heavy Trucks	0.5	0.5	0.5	0.5	0.5	0.1	16.2%
Total Vehicles	15.4	14.1	15.7	14.7	14.8	1.2	8.7%

### Retail Inventories, Motor Vehicle and Parts Dealers (billions of dollars) <sup>(d)</sup>

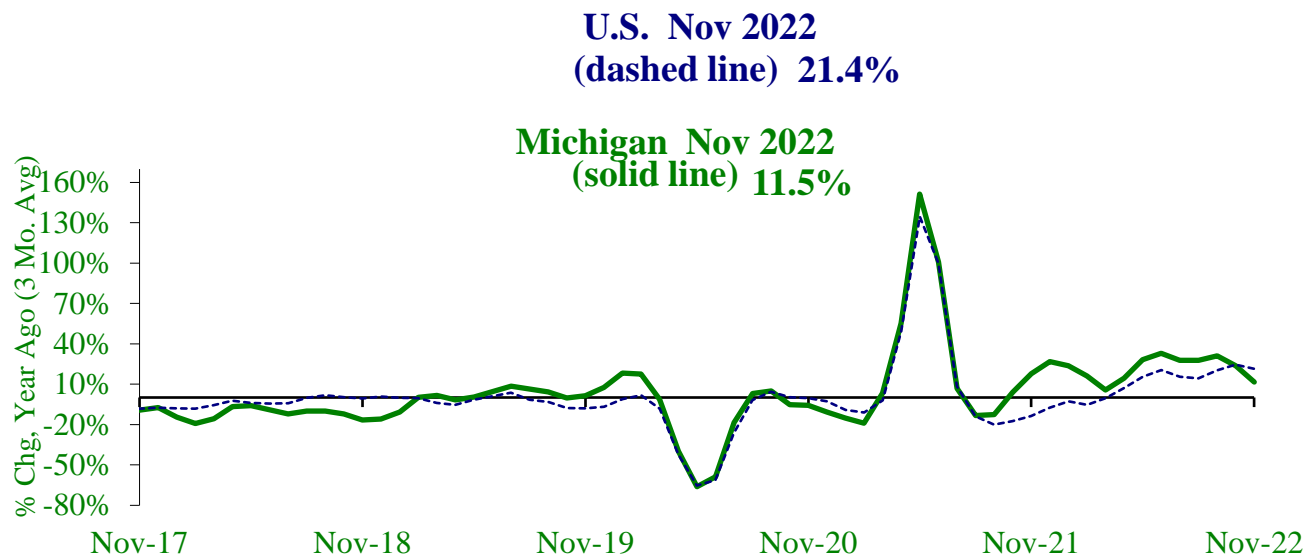
	2021 <u>Average</u>	<u>Aug-22</u>	<u>Sep-22</u>	<u>Oct-22</u>	3 Month Average	Chg fr Year Ago Level	Chg fr Year Ago %
Inventories	\$162.1	\$189.4	\$193.8	\$194.9	\$192.7	\$48.2	32.8%
Inventory/Sales Ratio	1.32	1.48	1.52	1.51	1.50	0.31	

# Michigan Vehicle Production Up from Year Ago

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- Michigan vehicle production fell 0.6 percent from November 2021 while national vehicle production increased 7.0 percent from last November. In November 2022, Michigan vehicle production totaled 181,372 units.
- In November 2022, auto production fell 4.2 percent year-over-year (y-o-y) in Michigan and was up 4.5 percent nationally; truck production decreased 0.3 percent in Michigan and was up 7.5 percent nationally.
- Comparing the three-month average of vehicle production in September 2022-November 2022 to production in September 2021-November 2021, Michigan's average production was up 11.5 percent while average production was up 21.4 percent nationally.

## Three-Month Average of Michigan Vehicle Production Up from Year Ago in November



## Motor Vehicle Production Statistics

(Thousands, unless otherwise specified)

	2021 Monthly <u>Average</u>	Sep <u>2022</u>	Oct <u>2022</u>	Nov <u>2022</u>	3 Month <u>Average</u>	Nov Level Chg <u>fr Yr Ago</u>	Nov % Chg <u>fr Yr Ago</u>
<b>U.S. Production <sup>(e)</sup></b>							
Autos	138.4	165.5	167.3	157.8	163.6	6.8	4.5%
Trucks	621.5	775.7	780.9	717.2	758.0	50.3	7.5%
Total	759.9	941.2	948.2	875.1	921.5	57.1	7.0%
<b>Michigan Production <sup>(f)</sup></b>							
Autos	11.1	17.0	17.4	15.8	16.7	(0.7)	-4.2%
Trucks	143.4	177.7	175.3	165.6	172.9	(0.5)	-0.3%
Total	154.4	194.7	192.8	181.4	189.6	(1.1)	-0.6%
Michigan as % of U.S.	20.3%	20.7%	20.3%	20.7%	20.6%	-1.6% pts	

# U.S. Economic Conditions

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	<u>Aug-22</u>	<u>Sep-22</u>	<u>Oct-22</u>	<u>Nov-22</u>	<u>Change from Year Ago</u>
<b>KEY ECONOMIC INDICATORS</b>					
Consumer Sentiment <sup>(h)</sup>	58.2	58.6	59.9	56.8	-10.6 points
ISM Manufacturing Index <sup>(i)</sup>	52.8	50.9	50.2	49.0	-11.6 points
ISM Non Manufacturing Index <sup>(i)</sup>	56.9	56.7	54.4	56.5	-11.9 points
<b>INFLATION <sup>(k)</sup></b>					
<b>1982-84 = 100 (CPI)</b>	<u><b>Aug-22</b></u>	<u><b>Sep-22</b></u>	<u><b>Oct-22</b></u>	<u><b>Nov-22</b></u>	<u><b>Change from Year Ago</b></u>
<b>Nov 2009 = 100 (PPI)</b>					
U.S. Consumer Price Index	296.2	296.8	298.0	297.7	7.1%
Detroit CPI	271.6	NA	274.5	NA	8.5%
U.S. Producer Price Index	140.0	140.1	140.6	140.8	7.4%
<b>INTEREST RATES</b>					
90 Day T-Bill <sup>(l)</sup>	2.63%	3.13%	3.72%	4.15%	4.10% points
10 Year Treasury Securities <sup>(l)</sup>	2.90%	3.52%	3.98%	3.89%	2.33% points
<b>INDUSTRIAL PRODUCTION <sup>(l)</sup></b>	104.4	104.8	104.7	104.5	2.5%
<b>CAPACITY UTILIZATION <sup>(l)</sup></b>	79.9%	80.1%	79.9%	79.7%	0.7% points
<b>RETAIL SALES <sup>(d)</sup></b>	\$685.7	\$684.5	\$693.5	\$689.4	6.5%
<b>HOUSING STARTS and SALES</b>					
(Millions Annual Rate)	<u><b>Aug-22</b></u>	<u><b>Sep-22</b></u>	<u><b>Oct-22</b></u>	<u><b>Nov-22</b></u>	<u><b>% Change From Year Ago</b></u>
Housing Starts <sup>(d)</sup>	1.508	1.465	1.434	1.427	-16.4%
Existing Home Sales <sup>(m)</sup>	4.780	4.710	4.430	4.090	-35.4%
<b>DURABLE GOODS ORDERS <sup>(d)</sup></b>	\$273.8	\$274.4	\$276.4	\$270.6	6.5%
<b>PERSONAL INCOME <sup>(c)</sup></b>					
(Billions, Seasonally Adj & Annualized)	<u><b>2021.4</b></u>	<u><b>2022.1</b></u>	<u><b>2022.2</b></u>	<u><b>2022.3</b></u>	<u><b>% Change From Year Ago</b></u>
Michigan	\$553.2	\$560.2	\$567.1	\$570.5	2.7%
U.S.	\$21,158.0	\$21,317.8	\$21,575.4	\$21,856.5	4.1%
<b>GROSS DOMESTIC PRODUCT <sup>(c)</sup></b>					
(Billions of Chained 2012	<u><b>2021.4</b></u>	<u><b>2022.1</b></u>	<u><b>2022.2</b></u>	<u><b>2022.3</b></u>	<u><b>Annualized % Chg From Last Qtr</b></u>
Dollars, Seasonally Adj & Annualized)	\$20,006.2	\$19,924.1	\$19,895.3	\$20,054.7	3.2%

- (a) Seasonally adjusted. Sources: Bureau of Labor Statistics, U.S. Department of Labor and Michigan Department of Technology, Management and Budget.
- (b) Bureau of Labor Statistics, U.S. Department of Labor (BLS 790). Page 2 Michigan three-month average unemployment rate graph values use interpolated monthly values for January 2021-August 2021.
- (c) Bureau of Economic Analysis, U.S. Department of Commerce.
- (d) Bureau of the Census, U.S. Department of Commerce. Seasonally adjusted.
- (e) Automotive News.
- (f) Michigan Department of Treasury.
- (g) Michigan Department of Technology, Management and Budget.
- (h) University of Michigan Survey of Consumers.
- (i) Institute for Supply Management (ISM), formerly NAPM.
- (j) The Conference Board.
- (k) Bureau of Labor Statistics, U.S. Department of Labor.
- (l) Seasonally adjusted rates (except interest rates). Federal Reserve System Board of Governors. 2012 equals 100. Treasury bill rate (secondary market).
- (m) National Association of Realtors.
- (n) University of Michigan Research Seminar in Quantitative Economic November 2022 Economic Forecasts.